



Design of a Probe Mission to an Earth-like Planet

Glenn NASA Academy 2007

Goals in Project Choice

- Useful to NASA
- Everyone can contribute something in their own field
- Is of public interest

Overall Mission

- Send a probe to Gliese 581 c
- Explore the possibility of life there
- Promote public interest in this mission and NASA in general

Our Tasks

- Investigate past probe missions and NASA outreach projects
- Design a mission plan in the form of a proposal for a larger NASA project
- Create a plan for public outreach
- Prepare a sample piece of outreach material

How does it benefit NASA?

- “To explore the universe and search for life” with the probe
- “To inspire the next generation of explorers” with exciting missions and outreach

Team Structure

- **Leadership** will be ad hoc.
- **Outreach:** Ashley Micks
- **Propulsion:** Kyle Gaiser, Jennifer Jones, Ashley Micks
- **Space Policy:** Bernard Murphy, Rebecca Arvanites, Stephanie Vasicek, Adam Pfendt
- **Scientific Missions:** Jessica Snyder, Stephanie Vasicek, Adam Pfendt
- **Autonomous Systems:** Jessica Snyder, Rebecca Arvanites
- **Power:** Kyle Gaiser, Jennifer Jones, Bernard Murphy

Timeline

For each sub-group:

- Basic research by 6/24
- Outline of proposal by 7/1
- Skeleton of website by 7/22
- First draft of proposal by 7/22
- Completed website by 8/6
- Final draft of proposal by 8/6

Project Advisors

- Each sub-group will attempt to contact one, to meet with at least once. For example:
 - Cheryl Bowman, Lee Mason (nuclear power)
 - Marc Millis (breakthrough propulsion)

Ongoing Components

- The outreach website will be accessible, but completed by the end of the 10 weeks.
- The probe mission itself, if adopted.
- The final report will be available online.
- Additional publications if merited
- Missions to other planets based on this model

Questions?

